

CLAIMS AMENDED ACCORDING TO ART 34 PCT

- 5 1. Conveying device comprising at least one conveying body (10) as well as rolling
bodies (1 and 1', resp., and 8) in operational connection with the conveying
body (10), wherein the rolling bodies (1 and 1', resp., and 8) comprise a plurality
of, but at least two, rollers (2, 2', 2'') and the rolling bodies are arranged
between guide rails (6 and 6', resp., and 5') and the at least one conveying body
10 in such a manner, that the rollers (2, 2', 2'') during displacement of the at least
one conveying body are freely rotatable, characterised in that the rolling bodies
(1, 1') comprise connecting bodies (4), wherein the connecting bodies (4) consist
of an elastic material, and wherein the rolling bodies (1, 1') furthermore
comprise axes (3, 24) and the rollers (2) relative to the connecting body (4) are
15 arranged to be freely rotatable around these axes (3, 24).
2. Conveying device in accordance with claim 1, characterised in that it comprises
a plurality of conveying bodies (10), that one connecting body (4) per rolling
body (1, 1') is present, that the connecting body (4) determines a distance
20 between the rollers (2), and that guide rails (6, 6', 5') and conveying bodies (10)
are loosely guided with respect to one another.
3. Conveying device in accordance with one of the claims 1 or 2, characterised in
that two rolling bodies (1 and 1') are arranged opposite one another at a straight
25 angle relative to one conveying body or to several conveying bodies (10) and are
operatively connected with the conveying body or the conveying bodies (10) and
the guide rails (6 and 6').
4. Conveying device in accordance with one of the claims 1 or 2, characterised in
30 that two rolling bodies (1 and 1') are arranged opposite one another at a not
straight angle relative to one conveying body or to several conveying bodies (10)

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and are in an operational connection with the conveying body or the conveying bodies (10) and with the guide rails (6 und 6').

- 5 5. Conveying device in accordance with claim 2 or 3, characterised in that three rolling bodies (1, 1', 8) are arranged relative to at least one conveying body (10) in such a manner, that mutually supporting one another they act opposing to the forces which the at least one conveying body (10) exerts on the rolling bodies (1, 1', 8) and for their part support themselves on the assigned guide rails (6, 6', 5').
- 10 6. Conveying device in accordance with claim 5, characterised in that, relative to two rolling bodies (1 and 1') at a straight angle opposing each other relative to the at least one conveying body (10), a third rolling body (8) is arranged at a right angle to it.
- 15 7. Conveying device in accordance with one of the preceding claims, characterised in that the connecting bodies (4) comprise receptacles (22) and that the rolling bodies (1, 1', 8) are supported in these receptacles (22) rotatable around an axis, wherein the axis is defined in particular by pointed cones (24) formed on the rollers (2, 2').
- 20 8. Conveying device in accordance with claim 7, characterised in that the axes (3) respectively are arranged on one side of a connecting body (4) and that on these axes rollers (2) are arranged freely rotatable.
- 25 9. Conveying device in accordance with claim 3, characterised in that at least one rolling body consists of balls (2').
- 30 10. Conveying device in accordance with one of the preceding claims, characterised in that the operational connection between rolling bodies (1, 1', 8) and the at least one conveying body (10) or a plurality of conveying bodies (10) is

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achieved by engagement grooves, respectively, guide grooves (7, 11) for the engagement of rollers (2) or balls (2') of the rolling bodies in these.

11. Conveying device in accordance with claim 1 or 2, characterised in that the
5 rolling bodies (1, 1') are connected together as a unit transverse to the direction of conveyance.
12. Conveying device in accordance with claim 11, characterised in that the rolling bodies are connected with an elastic means of connection (4, 4').
- 10 13. Conveying device in accordance with the claims 12 and 10, characterised in that the operational connection between rolling bodies (1, 1', 8) and the at least one conveying body (10) or a plurality of conveying bodies (10) is effected by contact grooves, respectively, guide grooves (7, 11) for the engagement of
15 rollers (2) or balls (2') of the rolling bodies in these.
14. Conveying device in accordance with claim 1 or 2, characterised in that two guide rails (6, 6') form a unit.
- 20 15. Conveying device in accordance with claim 14, characterised in that the conveying bodies (10) for the engagement in one of the two guide rails comprise rollers (2, 2', 2'') or instead of movable rollers fixed rollers.
- 25 16. Conveying device in accordance with claim 14 and/or 15, characterised in that the conveying bodies (10) for the engagement in one of the two guide rails comprise a guide groove (11) for the rollers (2, 2', 2'').
17. Conveying device in accordance with claim 1 or 2, characterised in that the rolling body (1, 1') consists of unconnected rollers (2, 2', 2'').

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18. Conveying device in accordance with claim 17, characterised in that the rollers (2, 2', 2'') are arranged in a receptacle (22) for rolling bodies in spacer cages (27) not connected with one another.
- 5 19. Conveying device in accordance with claim 1 or 7, characterised in that only one rolling body (1) is present, the conveying bodies (10) roll off over the rolling body (1) on a first side of the guide rail (6), and the conveying bodies (10) comprise further rollers (2), which roll on a second side of the guide rail (6).
- 10 20. Conveying device in accordance with one of the preceding claims, characterised in that means (12) for the attachment of means for temporarily holding articles to be conveyed are provided on the conveying bodies (10).
- 15 21. Conveying device in accordance with at least one of the preceding claims, characterised in that conveying bodies (10) are connected to one another with a connecting means (13) for the conveying bodies.
- 20 22. Conveying device in accordance with one of the claims 1 to 13, characterised in that it is a device closed in itself, in which all conveying bodies (10) are in engagement with one another and the rolling bodies (1, 1', 8) as well as the guide rails (6, 6', 5') lead back into themselves.
- 25 23. Conveying device in accordance with the claims above, characterised in that the conveying bodies (10) are designed in such a manner that they are capable of being driven by means of a drive (19).
24. Utilisation of the device in accordance with the claims 1 to 23 for the conveyance of flat products, in preference printed products.

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25. Utilisation of the device in accordance with the claims 1 to 23 for the conveyance of packages and of travelling luggage.

26. Method for the conveyance of articles, characterised in that a conveying body
5 for the conveyance of a product on and/or between rolling bodies, which are in contact with guide rails, is moved in such a manner, that the conditions:

$$V_{\text{Guide rail}} = 0 \quad \text{and}$$

$$V_{\text{Rolling body}} < V_{\text{Conveying body}}$$

10 are fulfilled.

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